

The present invention relates to a cleaning and/or treatment device for cleaning and/or treating surfaces such as floors, pavements and carpets. The invention particularly relates to a cleaning and/or treatment device using cleaning/treatment solution, wherein the solution is recirculated and thereby used more than one time. The cleaning device comprises a filter unit for cleaning dirt from a dirty solution tank and means for recirculating said cleaned solution to a clean solution tank, wherein said filter unit comprises at least one cross-flow filter, said cross-flow filter preferably being a membrane filter. The invention also relates to a process of cleaning and/or treating surfaces using such a device.